Compared with *P. rhyssa*, *P. altissima* is not only much smaller, but also much flatter, with the aperture consequently narrower and the last whorl less evenly rounded. I have specimens of *P. rhyssa* from the original locality, collected by Mr. Ashmun ; the species was also found by Prof. Townsend in the White Mountains, at an altitude of about 8,000 feet.

The following form, also from the White Mountains, seems worth defining:

Polygyra rhyssa var. **hyporhyssa** v. nov.

Like *P. rhyssa* in size and form, but umbilicus wider, exposing the penultimate whorl ; sculpture finer, consisting of striæ rather than riblets. Collected by Prof. C. H. T. Townsend on the lower slopes of Sierra Blanca, N. M., above head of Ruidoso Creek, in aspen belt, about 9,500 ft. alt., Aug. 14, 1898. One specimen, diam., max. 15, min. 12⅗, alt. 9 mm. This is clearly a variety of *rhyssa*, and is not the same as Dall's MS. *P. miorhyssa*, which appears to me to be a perfectly distinct species.

NEW PISIDIA.

BY DR. V. STERKI.

P. roperi n. sp.

Mussel rather large, strongly inflated when mature, very little so when young ; oblong to ovoid in outline, margins regularly curved, with no projecting angles (in the adult) ; scutum and scutellum scarcely marked ; beaks moderately posterior, very broad, surface somewhat glossy, with irregular, not sharp, striæ and some strongly marked lines of growth ; color of the dry shell straw to yellowish-horn, often with one to several fine, concentric lines of purple ; shell rather thin, nacre whitish, muscle insertions scarcely marked, hinge comparatively fine and short ; cardinal teeth quite small, the right one moderately curved, slightly thickened at the posterior end ; the left ones very short ; the inferior slightly angular, truncated or pointed on top, the superior sometimes almost obsolete ; lateral teeth short, small, scarcely projecting into the interior ; ligament rather fine.

Long. 5·5, alt. 4·4, diam. 3.8 (4) mill.

Long. 4·5, alt. 3·7, diam. 3·0 mill.

Soft parts pink, especially so the foot and mantle edges; the living mussel appears pale red; but the color soon fades away after the death of the animal; it is also very pale, scarcely noticeable in the young, becoming more intense with the age of the animal.

Habitat: Maine, Rhode Island, Indiana, Illionis and Minnesota; probably also Utah, California and Washington.

Pis. roperi can not be mistaken for any other species except some forms of *P. abditum* Hald., but is at once distinguished from the latter species by its comparatively very broad beaks, the more elongated and more regular outline, the different appearance of its surface, usually the lighter color, the comparatively finer and shorter hinge, and, in the living animal, by the pink color of the soft parts, shining through the shell. It is the only species in which that color has been noticed so far, yet it remains to ascertain whether this be a constant character. But, however that may be, the species is valid. From several places specimens were obtained in company with *P. abditum*, and at once recognized as distinct. It was first noticed among Pisidia sent by Mr. E. W. Roper, in whose honor it is named. The largest and most beautiful specimens were collected in Higginbotham's spring, near Joliet, Ill., by Messrs. J. H. Ferris and G. H. Handwerk, who, from April, 1896, to this summer, repeatedly forwarded me lots of living specimens together with *P. abditum* and another species.

There are specimens from the Wasatch Mountains, Utah (sent by Mr. Bryant Walker), the Sierra Nevada (Mr. Roper), and Seattle, Wash. (Mr. P. B. Randolph), resembling the present species, although somewhat different from it as well as among themselves, and it is with some doubt that they were referred to *P. roperi*.

Pis. fallax var. **sepentrionale** n.

Differs from the type by the following characters: it is more rounded in outline, less inflated, the beaks are less prominent and without ridges; the striation is less sharp; usually there are whitish dots and irregular blotches, evidently caused by disease.

This seems to be a northern form. Pine and Mountain Rivers on the south shore of Lake Superior, collected by Mr. Bryant Walker; Clear Water River, Minn., in company with rather typical and intermediate specimens (Mr. H. E. Sargent), Little Madawaska River at New Sweden, and Aroostook River at Caribou, Me. (Mr. Olof O. Nylander), from the latter river in 1896 and '98, and there are some specimens with distinct ridges on the beaks, or indications of such.

It may be mentioned here that typical *P. fallax* has been collected in the Sand Creek, Ottawa Co., and Plaster Creek, Kent Co., Mich., by Dr. R. J. Kirkland.

Pis. walkeri var. **mainense** n.

Differs from the type in the following points: it is smaller, shorter, especially so the anterior part, and less saccate. But it re-resembles *P. walkeri* by the small beaks situated near the very short and truncated posterior end, the surface sculpture and color, and the thin shell. Placed side by side with typical specimens, which, in outline, have a marked resemblance with *P. virginicum*, it would hardly be ranged under the same species. But by comparing numerous specimens from different places, I came to the conclusion that they are not distinct.

Habitat: Different waters near Caribou, Aroostook Co., Maine, collected by Mr. Olof O. Nylander.

New Philadelphia, Ohio, Sept., 1898.

HALIOTIS CRACHERODII Var. CALIFORNIENSIS Swainson.

BY H. A. PILSBRY.

In his "Zoological Illustrations," Vol. II, pl. 80 (1821–2) Swainson describes and figures the "small-holed Californian ear-shell," which differs, he states, from the ordinary black ear-shell by its more numerous smaller holes, deeper spiral, differently shaped outer lip, etc. Mr. Fred L. Button, of Oakland, has lately forwarded to me a specimen from Guadaloupe Island, off Lower California, which agrees well with Swainson's account and figures, and unmistakably indicates, I think, a valid variety of *H. Cracherodii*. Mr. Button writes: "It came to me as *H. Cracherodii* var. *californica* Stearns, as I wrote you. On looking it up I find it mentioned several times by Dr. Carpenter, both in his Brit. Asso. Report, 1856 (pp. 174, 199, 291, 320, 350 and 351), and in his Smithsonian Report, 1872 (pp. 6, 6, 13, 84, 100 and 137). In the latter, he speaks of it as the *rare* var. of *H. Cracherodii*, and calls it an 'extreme var. of *H. cracherodii*,' having 10–11 holes (p. 13).

"Swainson's *H. californiensis* was figured in Zool. Ill., II, 80, with 10 small holes. I have one with 16 holes. The specimen I send is from Guadaloupe Island, Lower California, nearly 1,000 miles south